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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/373,658	08/13/1999	Luisa Iruela-Arispe	1448.1070006	2817

7590 12/03/2002  
STERNE KESSLER GOLDSTEIN & FOX PLLC  
SUITE 600  
1100 NEW YORK AVENUE NW  
WASHINGTON, DC 20005-3934

EXAMINER

CANELLA, KAREN A

ART UNIT	PAPER NUMBER
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1642

DATE MAILED: 12/03/2002

29

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/373,658

Applicant(s)  
Iruela-Arispe et al

Examiner  
Karen Canella

Art Unit  
1642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 months MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 24-37, 46-68, and 77-85 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-37, 46, 47, and 57-68 is/are allowed.
- 6) ☒ Claim(s) 48-56 and 77-85 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 28
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Continued Prosecution Application***

1. The request filed on September 25, 2002 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/373,658 is acceptable and a CPA has been established. An action on the CPA follows.
2. Claims 38-45 and 69-76 have been canceled. Claim 77 has been amended. Claims 24-37, 46-68 and 77-85 are under consideration.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

### ***New Grounds of Rejection***

4. Claims 77-85 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 77 recites the limitation "wherein said polynucleotide encodes a polypeptide having thrombospondin activity". The metes and bound of the claim cannot be determined as no definition of thrombospondin activity has been made in the specification, and the art recognizes that thrombospondins have cell adhesion, platelet aggregation, cell proliferation, vascular growth factor and tissue repair activities as well as activities directed toward angiogenesis. Amendment of the claim to recite a functional activity directed toward angiogenesis is recommended, (i.e. wherein said protein encodes a polypeptide which inhibits angiogenesis in vivo).
5. Claims 48-56 and 77-85 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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(A)As drawn to new matter

Claim 77 has been amended to incorporate the limitation “wherein said polynucleotide encodes a polypeptide having thrombospondin activity”. However, this was not contemplated by the specification or originally filed claims. Although thrombospondins exhibit angiogenic activity, they possess other activities with regard to cell adhesion, platelet aggregation, cell proliferation, vascular growth factor and tissue repair activities, and methods of using said polynucleotides encoding polypeptides having the aforesaid activities are not supported by the specification as filed.

(B)As drawn to polynucleotides comprising variant nucleic acid sequences.


Claim 48 is drawn to a polynucleotide comprising a nucleotide sequence at least 95% identical to the nucleotide sequence of SEQ ID NO:125. Claim 49 embodies the polynucleotide of claim 48 wherein the polynucleotide comprises a nucleotide sequence at least 95% identical to nucleotides 466 to 3366 of SEQ ID NO:125. Claims 48 and 49 are drawn to a genus of variant polynucleotides. The claims do not limit the genus by functional attributes of the polynucleotide sequence or the protein encoded thereby. Therefore the claims read on a genus of polynucleotides having widely differing attributes. The specification teaches SEQ ID NO:1 and SEQ ID NO:125. The specification does not teach a number of species which would be representative of said genus. Since structural and functional attributes which could distinguish member of the genus from non-members are missing from the disclosure and because the genus is highly variant, SEQ ID NO:1 and SEQ ID NO:125 are insufficient to support the claims. One of skill in the art would conclude that applicant was not in possession of the claimed genus at the time of filing.

6. All other rejections and objections as set forth in Paper No. 19 are withdrawn.

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***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen Canella whose telephone number is (703) 308-8362. The examiner can normally be reached on Monday through Friday from 8:30 am to 6:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Caputa, can be reached on (703) 308-3995. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

  
Karen A. Canella, Ph.D.

Patent Examiner, Group 1642

December 2, 2002